

Department of Education Student Financial Assistance

Unit Test Plan

The Unit Test Plan deliverable accurately and completely documents the unit test conditions and expected results used to test a module. The deliverable also categorizes the unit test conditions and expected results into logical groups of test cycles. The unit test plan is made up of two components:

- 1. Unit Test Conditions and Expected Results
- 2. Unit Test Cycle Control Sheet

IPT Name:				
Deliverable Name: Unit Test Plan				
Contact Informa	tion	·		
	Name	Channel Unit		
IPT Sponsor				
Channel Task				
Manager				
CIO Task				
Manager				
Contractor				
Task Manager				
Task Order Number:				



Unit Test Conditions and Expected Results Template Description

The Unit Test Conditions and Expected Results deliverable describes all of the conditions used to test the modules of the application and indicates the expected results of these tests. Use the Unit Test Conditions and Expected Results deliverable to develop unit test scripts.

The descriptions of the fields/terms used in the above sample document are given below.

- [1] **Product** The name of the product for which this deliverable was produced.
- [2] Release The specific product release number for which this deliverable was produced.
- [3] **Platform** The type of application (operating system and hardware) on which the product was designed to run.
- **[4] Configuration** A description of how the product is configured; for example, a specific application setting or a tool that was used to manage a group of application settings.
- [5] **Prepared by/Date** The initials of the person who originally prepared this deliverable, and the date on which the deliverable was prepared.
- **[6] Approved by/Date** The initials of the person who approved the deliverable (if applicable), and the date on which it was approved.
- [7] **Version** The version number of the deliverable, indicating how many times it has been revised.
- [8] Status An indicator of whether or not the deliverable has been approved by a project manager.
- [9] **Component** The name or ID of the component being tested.
- [10] **Detailed Condition** The reference number for the detailed test condition listed in this row of the table.
- [11] **Specification Cross-Reference** The name of the file that describes the specification being tested by this condition.
- **[12] Description** A short description of the appropriate business event, summary condition, or detailed condition.





[13] Expected Results - A short description of what is expected to happen when this test condition is executed.

[14] Cycle Number - A cycle is a logical group of related test conditions. This field indicates to which specific test condition a cycle belongs.



Unit Test Conditions and Expected Results: PTS System

[1] Product: Problem Tracking System (PTS) [2] Release: 1.0

[3] Platform: Windows NT/SQL Server

[4] Configuration: With Test Plan Management System (TPMS)

[5] Prepared By: VJ Date: 01/05/yy [7] Version: 1.0

[6] Approved by: LVI Date: 01/26/yy [8] Status: Approved

[9] Module: PTS0814: CheckGeneralInformationWindow

[10] Detail Conditio n	[11] Specification X-Ref	[12] Description	[13] Expected Results	[14] Cycle Numbe r
1	txtGenDateFound	On the General Information Tab, in the Date Found field, enter date that exists in the future.	Error Message displayed: "Date Found must be Earlier than Date Created."	3
2	txtGenDateFound	On the General Information Tab, in the Date Found field, enter current date. Date accepted (validation passed). User permitted to tab to the next field.		1
3	txtGenDateFound	On the General Information Tab, in the Date Found field, enter date that does not exist (i.e., February 31).	Error Message displayed: "You have entered an Invalid Date."	3
4	txtGenDateFound	On the General Information Tab, in the Date Found field, enter valid date prior to current date.	Date accepted (validation passed). User permitted to tab to the next field.	2
5	txtGenDateFound	On the General Information Tab, in the Date Found field, enter alphanumeric values.	Error Message displayed: "You have entered an Invalid Date."	3
6	txtGenDateFound	On the General Information Tab, in the Date Found field, enter incomplete date (dd/mm).	Year defaults to current year. Date accepted (validation passed). User permitted to tab to the next field.	2





7	txtgenshortdesc	On the General Information Tab, in the Short Description field, enter the entire 50 byte field.	Allowed to enter 50 bytes (validation passed). User permitted to tab to the next field.	1
8	txtgenshortdesc	Sc On the General Information Tab, in the Short Description field, enter 1 passed). User permitted to tab to the next field.		2
9	txtgenshortdesc	On the General Information Tab, in the Short Description field, enter 51 bytes. Not permitted to enter more than 50 bytes. Not error displayed, typing will be truncated.		3
10	txtgenshortdesc	On the General Information Tab, in the Short Description field, do not enter a short description.	Error Message displayed: "Short Description Required."	2
11	chkGenSupportdoc			1
12	chkGenSupportdoc	On the General Information Tab, in the Supporting Documents checkbox , uncheck box.	Permitted to uncheck the box. Check mark no longer displayed. Able to tab to next field.	2
13	cboGenProblemTyp e	On the General Information Tab, in the Problem Type drop down list box, select PEND from the list.	Permitted to select value. Value displayed in box. Able to tab to the next field.	1
14	cboGenProblemTyp e	On the General Information Tab, in the Problem Type drop down list box, select CR from the list.	Permitted to select value. Value displayed in box. Able to tab to the next field.	2
15	cboGenProblemTyp e	On the General Information Tab, in the Problem Type drop down list box, select DEFECT from the list.	Permitted to select value. Value displayed in box. Able to tab to the next field.	2
16	cboGenProblemTyp e	On the General Information Tab, in the Problem Type drop down list box, select ERROR from the list.	Permitted to select value. Value displayed in box. Able to tab to the next field.	2
17	cboGenProblemTyp e	On the General Information Tab, in the Problem Type drop down list	Permitted to select value. Value displayed in box. Able to tab to the	2





		box, select FAULT from the list.	next field.	
18	cboGenProblemTyp e	On the General Information Tab, in the Problem Type drop down list box, select ISSUE from the list.		
19	cboGenProblemTyp e	On the General Information Tab, in the Problem Type drop down list box, enter a value that does not exist in the list.	Entry of item not in list box not permitted. The application will pull up the entry closest in spelling to what the user entered.	3
20	cboGenProblemClas s	On the General Information Tab, in the Problem Class drop down list box, select value APPLICATION.	Permitted to select value. Value displayed in box. Able to tab to the next field.	1
21	cboGenProblemClas s	On the General Information Tab, in the Problem Class drop down list box, select value ARCHITECTURE.	Permitted to select value. Value displayed in box. Able to tab to the next field.	2
22	cboGenProblemClas s	On the General Information Tab, in the Problem Class drop down list box, select value DATA.	Permitted to select value. Value displayed in box. Able to tab to the next field.	2
23	cboGenProblemClas s	On the General Information Tab, in the Problem Class drop down list box, select value DATABASE.	Permitted to select value. Value displayed in box. Able to tab to the next field.	2
24	cboGenProblemClas s	On the General Information Tab, in the Problem Class drop down list box, select value DOCUMENTATION.	Permitted to select value. Value displayed in box. Able to tab to the next field.	2
25	cboGenProblemClas s	On the General Information Tab, in the Problem Class drop down list box, select value ENVIRONMENT.	Permitted to select value. Value displayed in box. Able to tab to the next field.	2
26	cboGenProblemClas s	On the General Information Tab, in the Problem Class drop down list box, select value HARDWARE.	Permitted to select value. Value displayed in box. Able to tab to the next field.	2
27	cboGenProblemClas s	On the General Information Tab, in the Problem Class drop down list	Permitted to select value. Value displayed in box. Able to tab to the	2





		box, select value INTERFACE.	next field.	
28	cboGenProblemClas s			2
29	cboGenProblemClas s	On the General Information Tab, in the Problem Class drop down list box, select value SYSTEM next field. SOFTWARE. Permitted to select value. Value displayed in box. Able to tab to the next field.		2
30	cboGenProblemClas s	On the General Information Tab, in the Problem Class drop down list box, select value OTHER.	Permitted to select value. Value displayed in box. Able to tab to the next field.	2
31	cboGenProblemClas s	On the General Information Tab, in the Problem Class drop down list box, select value NOT IDENTIFIED.	Permitted to select value. Value displayed in box. Able to tab to the next field.	2
32	cboGenProblemClas s	On the General Information Tab, in the Problem Class drop down list box, enter a value that does not exist in the list.	Entry of item not in list box not permitted. The application will pull up the entry closest in spelling to what the user entered.	3
33	cboGenProblemSeve rity	On the General Information Tab, in the Problem Severity drop down list box, select value A.	Permitted to select value. Value displayed in box. Able to tab to the next field.	1
34	cboGenProblemSeve rity	On the General Information Tab, in the Problem Severity drop down list box, select value B.	Permitted to select value. Value displayed in box. Able to tab to the next field.	2
35	cboGenProblemSeve rity	On the General Information Tab, in the Problem Severity drop down list box, select value C.	Permitted to select value. Value displayed in box. Able to tab to the next field.	2
36	cboGenProblemSeve rity	On the General Information Tab, in the Problem Severity drop down list box, select value D.	Permitted to select value. Value displayed in box. Able to tab to the next field.	2
37	cboGenProblemSeve rity	On the General Information Tab, in the Problem Severity drop down list	Entry of item not in list box not permitted. The application will pull	3





		box, enter a value that does not exist in the list.	up the entry closest in spelling to what the user entered.	
38	cboGenProblemPrio rity	On the General Information Tab, in the Problem Priority drop down list box, select value A.	Permitted to select value. Value displayed in box. Able to tab to the next field.	1
39	cboGenProblemPrio rity	On the General Information Tab, in the Problem Priority drop down list box, select value B.	Permitted to select value. Value displayed in box. Able to tab to the next field.	2
40	cboGenProblemPrio rity	On the General Information Tab, in the Problem Priority drop down list box, select value C.	Permitted to select value. Value displayed in box. Able to tab to the next field.	2
41	cboGenProblemPrio rity	On the General Information Tab, in the Problem Priority drop down list box, select value D.	Permitted to select value. Value displayed in box. Able to tab to the next field.	2
42	cboGenProblemPrio rity	On the General Information Tab, in the Problem Priority drop down list box, enter a value that does not exist in the list.	Entry of item not in list box not permitted. The application will pull up the entry closest in spelling to what the user entered.	3



Unit Test Cycle Control Sheet Template Description

The Unit Test Plan deliverable is used to track unit testing. The deliverable records the scheduled and actual start and end dates of the unit test cycles. This deliverable is used to document each cycle with start and end dates for unit test execution. As the unit test execution proceeds, update the cycle control sheet with actual start and end dates.

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- [7] **Version** The version number of the deliverable, indicating how many times it has been revised.
- **[8] Status** An indicator of whether or not the deliverable has been approved by a project manager.
- [9] **Module** The name of the module being tested in this test cycle.
- [10] Cycle Number The sequence in which the test cycle will be run.
- [11] **Description** A short description of the test cycle.
- [12] Scheduled Start/End Date The dates on which the specified test cycle is scheduled to begin and end, respectively.



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[13] Actual Start/End Date - The dates on which the specified test cycle was actually started and completed, respectively.

Unit Test Cycle Control Sheet: PTS System

[1] Product: Problem Tracking System (PTS) [2] Release: 1.0

[3] Platform: Windows NT/SQL Server

[4] Configuration: With Test Plan Management System (TPMS)

[9] Module: PTS0814: CheckGeneralInformationWindow

[10] Cycle Number	[11] Description	[12] Scheduled Start Date	Scheduled End Date	[13] Actual Start Date	Actual End Date
1	Mainline Processing	02/07/yy	02/08/yy		
2	List Box Function Validation	02/08/yy	02/09/yy		
3	Exception Processing	02/09/yy	02/10/yy		